



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,446	01/04/2006	Ikao Shimoda	1207-131	8048
23117 7590 02/25/2008 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER				
BURCH, MELODY M				
ART UNIT		PAPER NUMBER		
3683				
MAIL DATE		DELIVERY MODE		
02/25/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/563,446

Applicant(s)

SHIMODA ET AL.

Examiner

Melody M. Burch

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-13 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 04 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5445249 to Aida et al. in view of US Patent 4705982 to Besson et al.

Re: claims 1-8. Aida et al. show in figure 2 a dynamic vibration absorber comprising: a weight 1, a frame body 3 which surrounds the weight, a plurality of vertically mounted members 10,11,12 which are interposed between the frame body and the weight so as to hold the weight with respect to the frame body movably with respect to all directions in a plane and immovably in a vertical direction perpendicular to the plane as disclosed in col. 5 line 66 - col. 6 line 1, and a damping mechanism 2,6 for damping the vibration of the weight in the plane.

Aida et al. are silent with regards to the vertically mounted members being U-shaped leaf spring.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the vertically mounted members of Aida et al. to

have been U-shaped leaf springs, as taught by Aida et al., in order to provide a functionally equivalent means of creating a damping force which acts on the weight 1.

4. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5445249 to Aida et al. in view of US Patent 4705982 to Besson et al. as applied to claim 1 above, and further in view of US Patent 2004/0134733 to Wood.

Aida et al., as modified, are silent with regards to the tuning of the system.

Wood teaches in paragraph [0017] and in figure 2 the use of a dynamic absorber being tuned to a natural frequency of a structure where the dynamic vibration is installed and also teaches the use of a plurality of dynamic vibration absorbers wherein a natural frequency of the weight, the mass of the weight, the spring constant or the damping coefficient of at least one of the dynamic vibration absorbers is different from that of another.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the tuning of the system of Aida et al., as modified, to have included the abovementioned tuning arrangement, as taught by Wood, in order to provide a quieter machine or system.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patents: 6286782 to Bansemir et al., 5052529 to Sutcliffe et al., 989958 to Frahm, 5595430 to Weyeneth and foreign reference JP-6098589 teach the use of vibration absorbers having a frame body surrounding a weight and damping members interposed between the frame body and the weight.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 571-272-7114. The examiner can normally be reached on Monday-Friday (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

mmb
February 15, 2008

/Melody M. Burch/
Primary Examiner, Art Unit 3683